CONSTRUCTION PROCESS

- After Notice To Proceed (NTP)
- CQM (Construction Quality Management)
 - ► Pre-Construction Conference
 - ► Quality Control and Quality Assurance
 - ► RMS/QCS software
 - ▶ Schedule Management
 - ▶ Payment Requests
 - ➤ Contract Modifications
 - ► Project Closeout
 - ► Contractor Evaluations



WHAT IS CQM?

Construction Quality Management

- The PROCESS to ensure that construction is performed:
 - According to plans and specifications
 - On time
 - Within a defined budget
 - Safely





BENEFITS OF CQM

Increased profit and production (less removal)
Improved planning and communication

Effective quality control (QC) system

Preventive versus reactive

Produce/maintain acceptable records

Produce end product complying with contract



AED RESPONSIBILITIES

- Establish standards & QC requirements
- Quality assurance (monitor QC program)
 - verify that QC is working effectively
- Determine payments earned by Contractor
- Facilitate completion of high-quality product



Quality Control Process

- Submittals
- 3-Phases of Control
 - Preparatory Inspection
 - Initial Inspection
 - Follow-up Inspections
- QC Tests
- Tracking Deficiencies
- Daily Reports





Quality Control Manager

- QC Manager works for Prime Contractor
 - ▶ Most knowledgeable person on site
 - ► Ensures *Quality* and conformance to contract
- QC Manager must be on site at all times
- Must NOT have duties as superintendant
- Has authority to stop work



PRE-CONSTRUCTION

- Pre-Construction Conference
 - ► Contractor will be familiarized with Corps of Engineers procedures and lines of authority for contractual, administrative, and construction matters.
- Pre-Construction Submittals
 - Quality Control Plan, Accident Prevention Plan, Construction Schedule, Design Submittals if applicable.



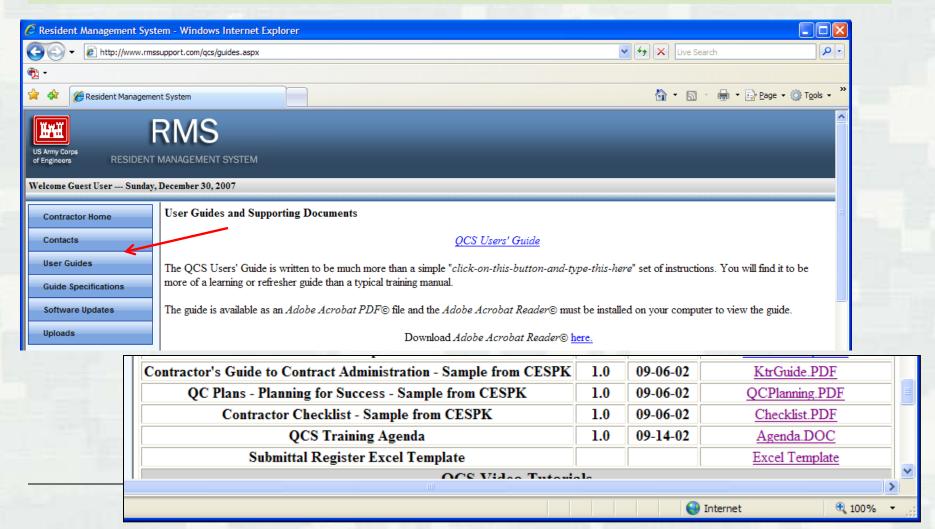
RMS/QCS

Resident Management System Quality Control System

- Resident Management System (RMS)
- The RMS Program used by Government QA Personnel to support Construction Quality Management and Administration.
 - Quality Control System (QCS)
- The quality control module of the main RMS program. It is the program to be used by Contractors to interface with the RMS program for both contract administration and quality control requirements.

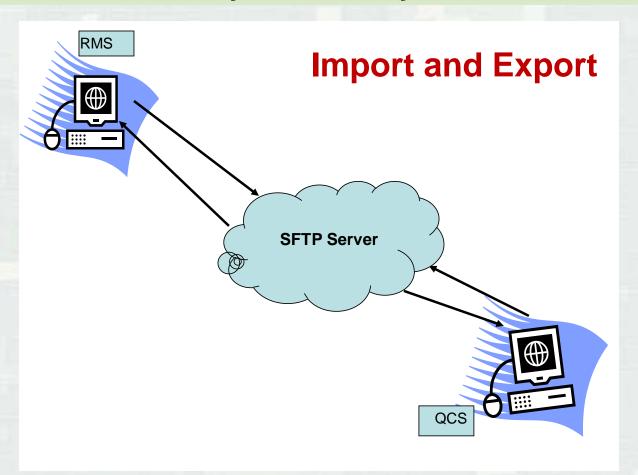
RMS/QCS

Resident Management System Quality Control System



RMS/QCS

Resident Management System Quality Control System





FAR Clause 52.236-15

Schedules for Construction Contracts

The Federal Acquisition Regulations (FAR) allows Government contracts to include the aforementioned Clause under the following conditions:

- 1. Fixed-Price construction contract
- 2. Contract amount expected to exceed the simplified acquisition threshold
- 3. Period of actual work performance exceed 60 days
- 4. May be used with contracts of less than 60 days if an unusual situation exists that warrants imposition of a schedule



The Clause is divided into three (3) basic parts:

PART 1

Submission of schedule within five days after work commences.

The schedule must be practicable showing the order in which the Contractor proposes to perform the work.

If the Contractor fails to submit a schedule, progress payment may be withheld.



PART 2

Updating the actual progress on the chart.

If Contractor falls behind his approved schedule he shall take steps necessary to improve progress.

May be directed to increase the number of shifts, overtime operations, days of work.

May be required to provide a recovery schedule



PART 3

Remedy for lack of compliance.

Determination may be made by the Government that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract.

Failure to comply may result in termination.



PROGRESS PAYMENTS

Payment Requests are submitted monthly.

PROMPT PAYMENT

14 Days after *acceptance* of contractor's pay request

Start date begins when both electronic (QCS) and signed pay request have been received.



PROGRESS PAYMENTS

Acceptable invoices and payment requirements:

- Proper Pay Request
 - Including Pay Certification
- No Disagreement in Quality or Quantities
- Compliance with Contract Plans and Specifications



SUBCONTRACTORS

Subcontractor information shall be entered into the QCS database and submitted within 14 calendar days of receipt of the QCS software from the Government.

It shall include the name, trade, address, phone numbers, and CONTRACT AMOUNT.



SUBCONTRACTORS

A subcontractor must be listed separately for each trade to be performed.

Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS.

PAYMENT CERTIFICATION must show payments made to subcontractors



REQUEST FOR INFORMATION

Submitted by contractor:

To clear up any discrepancies or a clarification to the contract.

First step in initiating the modification process.





What is a Contract Modification?

A contract modification is <u>any written change to</u> the terms of a contract. The contracting officer is the <u>only</u> person who has the authority to change the terms of the contract by processing a modification to the contract.



There are two types of modifications:

Bilateral and Unilateral

Unilateral Modifications are signed only by the Government's Contracting Officer (or designated authority), without the contractor's consent.

Bilateral Modifications, are signed by both contracting parties: the Contracting Officer (or designated authority) and the contractor. These modifications are fair and reasonable to both contracting parties.



Unilateral Modifications

Used to make administrative changes Issue suspensions of work Issue termination notices Award contract options

Issue Change Orders



Bilateral Modifications are used to...

Definitize change orders – make negotiated equitable adjustments to the contract resulting from the issuance of a change order.



CLOSE-OUT

- Red Zone Meeting
- Quality Control

Inspections









RED ZONE MEETING

When It's Held

Typically when the project is 80% complete

Who Attends

Contractor, Corps, and Customer

Goal

Build a schedule of events necessary to achieve project completion and closeout within 120 days of BOD

PRE-FINAL INSPECTION

Scheduled by contractor

Contractor and Corps representatives attend

Corps makes a punch list and submits to the Prime Contractor with a due date.

FINAL INSPECTION

- Contractor, Corps, user, and
 - customer attend
- Confirm completion of punch list
- Facility is accepted by the Government





CLOSE-OUT DOCUMENTS

AS-BUILT DRAWINGS

OPERATION & MAINTENANCE MANUALS

FINAL TEST REPORTS

WARRANTIES



CONTRACTOR EVALUATIONS

The rating is comprised of five major sections:

- -- Quality Control
- -- Timely Performance
- -- Effectiveness of Management
- -- Compliance with Safety Standards



CONTRACTOR EVALUATIONS

RATINGS

- -- Outstanding
- -- Above Average
- -- Satisfactory
- -- Marginal
- -- Unsatisfactory



CONTRACTOR **EVALUATIONS**

The evaluation will be prepared by:

- -- Government's QA Representative
- Resident EngineerArea Engineer

The completed evaluation will be stored for 6 years in a secure database accessible worldwide.

